

Pertussis Disease

Pertussis is a reportable disease. Call Maine CDC 1-800-821-5821.

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Definition:

Pertussis or whooping cough is caused by bacteria called *Bordetella pertussis*.

Signs and Symptoms:

The first signs of pertussis are similar to a cold (sneezing, runny nose, low-grade fever, and a cough). After one or two weeks, the cough gets worse. The paroxysmal cough occurs in sudden, uncontrollable bursts where one cough follows the next without a break for breath and may lead to post-tussive vomiting. The person may look blue in the face and have a hard time breathing. Many children will make a high-pitched whooping sound when breathing in after a coughing episode. Over time, coughing spells become less frequent, but may continue for several weeks or months.

Transmission:

Pertussis is spread from person to person through the air. A person has to breathe in droplets from an infected person to get sick. People are contagious for 21 days.

Diagnosis:

A specimen is collected for testing from a nasopharyngeal swab. Laboratory criteria for diagnosis are isolation of *Bordetella pertussis* from clinical specimen or polymerase chain reaction (PCR) for pertussis.

Treatment:

Pertussis can be treated with antibiotics, but treatment may not cure the coughing right away. Pertussis bacteria die off naturally after 21 days of coughing; if antibiotics are not started within that time, they are no longer recommended. Antibiotics can also be given to close contacts of persons with pertussis to prevent them from getting sick.

Role of the School Nurse:

[Maine Department of Education Rule Chapters](#) (126/261) requires students entering school be immunized against Pertussis. See School Health Manual section on Immunizations.

Prevention:

- Update and maintain vaccine records
- School requirements:
 - Five doses of any DTP containing vaccine or DT (pediatric). If the fourth dose was administered on or after the fourth birthday, then only four doses are required
 - 1 dose of Tdap vaccine is required for children entering 7th grade
- Teach students and staff to cover their noses and mouths when sneezing or coughing

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- Promote proper hand washing particularly after using facial tissues or having contact with respiratory secretions to prevent the spread of disease.

Exclusions:

Consult with Maine CDC to consider exclusions from work, school, daycare, and social activity.

- Persons within the infectious period (<21 days after symptom onset) for 5 days after starting antibiotics
- If the case is not treated it is recommended that s/he be excluded for 21 days after the onset of symptoms
- If it has been >21 days since symptom onset, the case is no longer infectious and no exclusions are recommended
- Asymptomatic contacts with antibiotics are not excluded

Reporting Requirements:

Pertussis is a reportable condition and should be reported immediately to Maine CDC at 1-800-821-5821.

Resources:

- Maine CDC pertussis disease website (including fact sheet and FAQ for school nurses)
<http://www.maine.gov/dhhs/boh/ddc/epi/vaccine/pertussis.shtml>
- Federal CDC pertussis disease website
<http://www.cdc.gov/pertussis/>
- Maine Immunization Program website
<http://www.maine.gov/dhhs/boh/ddc/immunization/>